

8.(amended) An isolated nucleic acid molecule selected from the group consisting of:

(a) a unique fragment of nucleotides 1-1382 of SEQ ID NO:1 between 12 and 1381 contiguous nucleotides in length,

(b) a unique fragment of nucleotides 1-2167 of SEQ ID NO:4 between 12 and 2166 contiguous nucleotides in length,

(c) complements of ["(a)"], and

(d) complements of ["(b)"],

wherein the unique fragment excludes nucleic acid molecules which consist only of a nucleotide sequence selected from the group consisting of SEQ ID NO:10 and SEQ ID NO:11.

9.(amended) The isolated nucleic acid molecule of claim 8, wherein the isolated nucleic acid molecule is selected from the group consisting of nucleic acid molecules [having] comprising fragments of SEQ ID NO:1 or of SEQ ID NO:4 of at least 14 contiguous nucleotides, at least 15 contiguous nucleotides, at least 16 contiguous nucleotides, at least 18 contiguous nucleotides, at least 20 contiguous nucleotides, at least 22 contiguous nucleotides and at least 25 contiguous nucleotides; nucleic acid molecules between 12 and 32 contiguous nucleotides, and nucleic acid molecules comprising at least 5 contiguous nucleotides not present in SEQ ID NO:10 or SEQ ID NO:11.

12.(amended) An expression vector comprising the isolated nucleic acid molecule of [any of] claim[s] 1[-11] operably linked to a promoter.

13.(amended) A host cell transformed or transfected with the expression vector of claim 12, optionally expressing an HLA molecule.

15.(amended) An isolated polypeptide encoded by the isolated nucleic acid molecule of [any of] claim[s] 1[-7], or a functional variant thereof having additions, deletions or substitutions in the amino acid sequence of the isolated polypeptide.

Sub E1
A3
17.(amended) An isolated polypeptide comprising an amino acid sequence selected from the group consisting of the amino acid sequence of SEQ ID NO:2, the amino acid sequence of SEQ ID NO:3 and the amino acid sequence of SEQ ID NO:5.

Sub E1
A6
21.(amended) An isolated polypeptide which selectively binds a protein encoded by the isolated nucleic acid molecule of [any of] claim[s] 1[-7].

22.(amended) The isolated polypeptide of claim 21, wherein the isolated polypeptide is an Fab or F(ab)₂ fragment of an antibody, a fragment of an antibody including a CDR3 region selective for the protein, or a monoclonal antibody.

Sub E1
A7
30.(amended) The method of claim 29 wherein the agent is selected from the group consisting of a nucleic acid molecule comprising SEQ ID NO:1 or a unique fragment thereof, a cytolytic T lymphocyte, an antibody and an antibody fragment; or wherein the interaction is determined by amplifying at least a portion of the nucleic acid molecule, or wherein the biological sample is isolated from a tissue selected from the group consisting of non-liver tissue, non-kidney tissue, non-bladder tissue, and non-testis tissue.

Sub E1
A8
35.(amended) A method for treating a subject with a disorder characterized by expression of a RUR-1 antisense cDNA-encoded tumor associated polypeptide, comprising
administering to the subject an amount of an agent which enriches selectively in the subject the presence of complexes of a HLA molecule and a tumor rejection antigen derived from [a] the RUR-1 antisense cDNA-encoded tumor associated polypeptide of claim 15,
sufficient to ameliorate the disorder.

36.(amended) The method of claim 35, wherein the agent is an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:3, or an immunogenic fragment thereof; or wherein the disorder is cancer excluding cancers selected from the group consisting of liver cancer, kidney cancer, bladder cancer, and testicular cancer.

Sub E1
A9
38.(amended) A method for treating a subject with a disorder characterized by expression of a RUR-1 antisense cDNA nucleic acid molecule or an expression product thereof, comprising:

administering to the subject an amount of autologous cytotoxic T cells sufficient to ameliorate the disorder, wherein the cytotoxic T cells are specific for complexes of an HLA molecule and [a] the RUR-1 antisense cDNA-encoded tumor associated polypeptide of claim 15 or an immunogenic fragment thereof.

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41.(amended) A method for treating a subject with a disorder characterized by expression of a RUR-1 antisense cDNA nucleic acid molecule or an expression product thereof, comprising:
administering to the subject an amount of [a] the RUR-1 antisense cDNA-encoded tumor associated polypeptide of claim 15 or an immunogenic fragment thereof sufficient to ameliorate the disorder.

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44.(amended) A method for enriching selectively a population of T cells with cytotoxic T cells specific for a RUR-1 antisense cDNA-encoded tumor associated polypeptide comprising:
contacting an isolated population of T cells with an agent presenting a complex of [a] the RUR-1 antisense cDNA-encoded tumor associated polypeptide of claim 15 or an immunogenic fragment thereof and a HLA presenting molecule in an amount sufficient to selectively enrich the isolated population of T cells with the cytotoxic T cells.

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47.(amended) A vaccine composition comprising
(a) a nucleic acid encoding a RUR-1 antisense cDNA-encoded tumor associated polypeptide or an immunogenic fragment thereof;
(b) a RUR-1 antisense cDNA-encoded tumor associated polypeptide or an immunogenic fragment thereof; or
(c) a cell which expresses a RUR-1 antisense cDNA nucleic acid or polypeptide, or an immunogenic fragment thereof.

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48.(amended) The vaccine composition of claim 47, wherein:
(a) the composition further comprises a nucleic acid encoding a second tumor associated polypeptide or an immunogenic fragment thereof which is a non-RUR-1 antisense cDNA-encoded tumor associated polypeptide or an immunogenic fragment thereof;